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15. September 2012

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Abstract

Migration is a universal phenomenon. From time immemorial women and men have travelled in search of better living. Historical nomadic instinct of man had been in tune with his necessities – more endurable climate, adequate water supply, fertile land and general availability of resources have attracted the human being always. It is expected that with development migration of due to Push factors will decrease while that due to Pull factors will increase. One of the important facets of labour market is therefore the profile of migrant workers and the nature of their movements. In spite of extensive work on migration in Indian context, recent studies on migration in India have focussed mainly on rural-urban migration or on migration from/between specific regions. The present paper explores the post reform nature of migration in India with special focus on migrant workers. Types of movement, profile of migrants vis-a-vis the natives, occupational distribution, and wages received by them have been examined. This has been contrasted with the pre-reform situation. Whether wage setting process is different for migrants is also examined through estimation of the wage function. Results suggest that migration among males are more of an 'assured' type rather than a 'search' type, in response to regular wage employment, where the better endowed / skilled / trained are moving. Pull factors are definitely playing more important role than push factors in this regard, though in post-reform period push factors have strengthened. Though better-off states with lower incidence of poverty and higher per capita income have higher migration rates, net out migration rates are considerably higher for poorer states indicating that condition of the source region is perhaps the most important factor in migration decisions.

I. INTRODUCTION

Migration is a universal phenomenon. From time immemorial women and men have travelled in search of better living. Historical nomadic instinct of man had been in tune with his necessities – more endurable climate, adequate water supply, fertile land and general availability of resources have attracted the human being always. River valley civilizations, death of cities as natural resources were depleted, setting up of newer civilizations in newer places bear testimony to the migratory tendencies of mankind. However, in modern era, human movements across countries are closely monitored and regulated and consequently the natural process of migration is no longer an absolute right of people. Most of the human movement is therefore intra-country and from one region to other. Even then there are two separate streams of migration. The first one is at the upper end of human capital hierarchy, to fill in existing surplus demand in the labour market of destination regions. Consequently, this process is highly selective in nature – in terms of either skill & training (for academic or technical manpower), or age & gender (for blue collar workers or service workers). This process is discriminatory and dependent on *'Pull factors'*. There is a second stream which emerges due to *'Push factors'* or distress conditions in the source regions (relative to the destination) – economic hardships in the form of low wages, high unemployment, heavy population pressure, etc. in the native places, and the lure of better earning opportunities in the economically vibrant destination region. It is expected that with development migration of due

to Push factors will decrease while that due to Pull factors will increase. One of the important facets of labour market is therefore the profile of migrant workers and the nature of their movements.

In spite of extensive work on migration in Indian context, recent studies on migration in India have focussed mainly on rural-urban migration (Kundu, 2009; Kumar, 2010), seasonal migration (Haberfeld *et al* 1999) or on migration from/between specific regions (de Haan, 2002; Mosse *et al*, 2002; Rogaly and Copland, 2003; Deshingkar and Start, 2003; Jha, 2008; Deshingkar *et al*, 2006; Deshingkar *et al*, 2008; Rodgers, 2010; Vijay, 2010). Notable exceptions to such limited studies have been Srivastava and Bhattacharyya (2002), de Haan and Dubey (2006), Shanthi (2006) Tumbe (2010), and de Haan (2011) who has examined migration in India in a macro framework. Rogaly *et al* (2002) and Joe (2009) looks at the reasons behind migration while Srivastava and Sasikumar (2003) looks at the impacts in both sending and receiving areas. However, none of these studies have examined the changing pattern of migration in post-reform India, especially the nature of movements. In this light the present paper explores the post reform nature of migration in India with special focus on migrant workers. Types of movement, profile of migrants vis-a-vis the natives, occupational distribution, and wages received by them have been examined. This has been contrasted with the pre-reform situation. Whether wage setting process is different for migrants is also examined through estimation of the wage function.

The methodology to be followed in the study can be outlined as follows. The study has used the data (Unit level records) from two surveys on Migration Particulars conducted by National Sample Survey Organisation (NSSO) of India for the 43rd and the 64th Rounds, pertaining to the years 1987-88 and 2007-08. These are large sample surveys conducted throughout India with a structured questionnaire. While the 1987 survey covered about 110 thousand households enumerating 667,848 persons, spread over 8518 villages and 4648 urban blocks, the 2007-08 survey (64th round) covered approximately 125 thousand households, enlisting 572,254 persons and covering 7921 villages and 4668 urban blocks (further details of the dataset and NSSO surveys will be available from www.mospi.nic.in). Migration rate has been calculated as percentage of people whose present place of enumeration is different from last usual place of residence. To explore the nature of migrant *workers*, we have considered only those who were at least 16 years of age at the time of migration.

II. MIGRATION: THEORETICAL EXPLANATIONS

Though social and political factors also affect migration, economic reasons have been paramount for most of the human movements across the globe – legal and illegal. For example, currently, Latin America has the highest emigration rate in the world, and Latin American cross-border migration is dominated by movements to high-wage labour markets in Canada and USA, not by movements to low-wage labour markets in neighbouring countries of the region itself. Ernest Ravenstein, widely regarded as the earliest migration theorist, developed certain 'Laws of Migration' using census data from England and Wales (Ravenstein, 1889). He concluded that both Push and Pull processes governed migration and while unfavourable conditions in one place push people out, favourable conditions in an external location pull them in. According to him the volume of migration decreases as distance increases; migration occurs in stages instead of one long move; population movements are bilateral; and migration differentials (e.g., gender, social class, age) influence a person's mobility.

Many theorists followed Ravenstein, and the dominant theories in contemporary scholarship are more or less variations of his conclusions. First, neoclassical economic theory (Hicks, 1939; Sjaastad, 1962; Todaro, 1969) suggests that migration is related to supply and demand for labour - movements as water seeking its own level. As long as differences exist in factor-endowments (availability of labour), there will be differences in factor returns also. This difference in factor returns (wages) provokes factors (labour) from surplus (and low wage) regions to move out to factor (labour)-scarce (and high wage) regions. If we add the issue of unemployment and lower probability of getting a job in a labour surplus region, we find that 'expected wage' in such an economy is much below that in a labour-scarce region – the gap being larger than the differences in actual wages providing additional impetus to factor movements. Such movements would ultimately lead to Factor Price Equalisation (FPE), or equality of wages across regions (Stolper and Samuelson, 1941). This theory therefore postulates that relative income difference is central to the migration decision, the process shall continue as long as differences in 'expected wages' exist, and will cease when the two regions reach equilibrium.

Second, *Segmented Labour-Market Theory* (Piore, 1979) argues that First World economies are structured so as to require a certain level of immigration to fill a secondary market of low-wage manual jobs that are necessary for the overall economy to function but are avoided by

the native-born population because of the poor working conditions associated with these. This can be generalised for intra-country movements also for large countries like India where regional differences are substantial.

Third, *World-Systems Theory* (Sassen, 1988) argues that international migration is a by-product of global capitalism. Contemporary patterns of international migration tend to be from the periphery (poor nations) to the core (rich nations) because factors associated with industrial development in the First World generated structural economic problems, and thus push factors, in the Third World.

These traditional approaches are based on the assumptions that migrants are well-informed and rational people making choices based on *'Pull'* and *'Push'* factors. Though this is crucial for migration decisions, there are several other factors as well. Recent empirical research suggest that attention should also be given to issues like incomplete information; household decision making mechanism; interaction between labour-contractors, migrant workers and employers; historical interaction between the two regions, etc. It is argued that distance, physical and political barriers, and numbers of dependents in the family are factors that could impede or even prevent migration. Migration process is selective because differentials in age, gender, and social class determine people's response to push-pull factors, and also shape their ability to overcome intervening obstacles. It is argued that these factors help not only in the perpetuation of the old socio-economic differences between source and destination regions in spite of migration (break down of FPE theorem, as expressed in Wood, 1994 and 1997; Wood and Ridao-Cano, 1999) but also in creation of new differences because of the migration process itself.

Apart from the differences in factor returns, conditions like inequality in the two regions will also affect magnitude and type of migration. If the source region has higher inequality compared to the destination, then only the poor have incentive to migrate while the richer class are better off where they are. Hence migration would be limited to the low-income (low capability also?) population only. On the contrary, higher inequality in the destination region encourages high-income people (high skilled too?) to migrate, as they would be further up the income ladder there, while the low-income group do not migrate, as they would be worse off in a higher unequal destination. In both these cases, migration will be limited to certain groups of people – sending off the poorer ones in the former case and the richer ones in the latter. If on the other hand both regions have similar inequalities (with destination region having higher

expected wage than source) then migration would be more uniform across income classes and hence larger in magnitude.

In addition to economic factors, physical proximity, social & cultural similarities, ease of mixing in the target society are factors that influence migration decisions.

Migration decisions are thus influenced by both individual and household characteristics, as well as socioeconomic conditions in both source and destination regions. Factors like age, education level, asset ownership, local job availability, economic opportunities in target regions determine migration rates and pattern.

Let us now examine the pattern of migration in India in the post-reform period with special focus on migrant workers.

III. MIGRATION IN INDIA: OVERVIEW

We are interested in internal migration within India and more specifically on long term migration. Numbers of persons who are presently residing in places other than their usual place of residence have increased from 180 million in 1987-88 to 287 million in 2007-08, increasing the proportion of migrants from 25 percent to 29 percent (Table 1 & 2). While proportion of migrants among males have declined that among females have increased, especially in rural areas. Mobility is higher in states like Delhi, Maharashtra, Punjab, Haryana, Chhattisgarh and Andhra Pradesh. In recent times Himachal Pradesh, Kerala and Gujarat have also emerged as preferred destination of migrants in place of West Bengal, Rajasthan and Orissa which exhibited high in-migration in the pre-reform period. Also to be noted is the fact that among males migrants are more concentrated in urban areas – almost one fourth of urban males are migrants compared to just 5 percent in rural areas.

IV. PROFILE OF MIGRANTS IN POST-REFORM INDIA

The profiles of migrants have also changed in post-reform period. In terms of education rural male migrants have a better educational profile with lower illiteracy and higher incidence of school pass out and above compared to the native populace (Table 3). Contrary to this, female migrants in both rural and urban areas are less qualified than their native counterpart. Educational compositions of both native and migrant males are similar in urban areas. These patterns have remained unchanged over time though the educational achievement levels have improved in the post-reform for all the sub-groups.

Participation in the labour market is also quite different for migrants and natives. Unemployment rates are lower for the migrants, partly because their participation in labour market is itself lower (Table 4).

For those who are employed, self employed is lower and wage employment is higher among migrant males compared to the natives (Table 5). On the other hand, for the females, self employment is higher among migrants compared to natives, especially in rural areas. Also prominent is that regular wage employment is much more common among migrant males compared to natives, especially in urban areas.

This perhaps signals that migrations among males are more of an 'assured' type rather than a 'search' type, in response to regular wage employment, where the better endowed / skilled / trained are moving. Pull factors are definitely playing more important role push factors in this regard.

Compared to pre-reform period however there is a remarkable trend. While incidence of casual jobs and self-employment have increased among male migrants, that of regular wage employment has increased in case of female migrants. Tightening labour market conditions in the post-reform period may have been responsible for this trend in male labour force where as for the females it may be a signal of greater participation in wage labour market and coming out of shackles. Occupational Pattern of migrants and native workers suggest that in the pre-reform period incidence of White Collar and Pink Collar jobs were more among migrants compared to the natives (Table 6). However in recent period, there is not much difference between the natives and migrants in terms of occupational distribution. Only in case of rural males, migrants are more diversified and their noticeable presence in White Collar jobs (government servants, may be) and Pink Collar jobs have continued.

V. REASONS FOR MIGRATION

Movement type and reasons for movement also provide important insights. In the pre-reform period the predominant type of male migration was employment related, rural to urban predominantly and mostly short distance – within the district or within the state (Table 7 & 8). For the females almost all of it was due to marriage, rural to rural and within a district. In the post-reform period the predominant causes have remained same, but there are some clear and some subtle changes as well. For the males urban to urban migration and long distance migration across districts and across states have significantly increased. Among females rural-urban migration has increased (marriage of rural women to townsfolk). Education has

emerged as a noticeable reason for migration, especially for males, with substantial long distance urban to urban migration for studies now than before. There has also occurred a share fall in natural calamity or social problem induced migration indicating a more stable social framework and better disaster management.

There is thus a clear trend of people becoming more mobile – rise in inter-state and inter-district migration coupled with a fall in intra-district, rural to rural migration. The world seems to have shrunk in the last two decades considerably!

VI. REGIONAL DIMENSION AND HUMAN CAPITAL FLOWS

Coming back to the regional dimension of migration it is observed that both in-migration and out-migration are higher in the relatively better off states. States with lower incidence of poverty and higher per capita income also have higher migration rates – both inward and outward (Table 9). However net out migration rates are considerably higher for poorer states indicating that condition of the source region is perhaps the most important factor in migration decisions. That destination quality is important is borne by the fact that in-migration is also higher in the richer states. There have been subtle changes in this regional pattern over time. In the post-reform period, while in-migration is higher in relatively well-off states, both out-migration and net outflow are higher in the poorer states. Also in the recent period rural poverty seems to be the dominant in pushing out people to other states.

A study of inter-state migration reveals that Delhi, Chhattisgarh, Karnataka, Maharashtra, Punjab, Uttaranchal and West Bengal are preferred destinations where net inflow is positive all throughout. In the post-reform period, Gujarat, Haryana, and Kerala have emerged to be new preferred destinations, replacing Madhya Pradesh, Tamilnadu, Andhra Pradesh and Orissa from the pre-reform period. However the quality of migrants varying in/out of states does very considerably. It is generally argued that regions with poverty, low income and high inequality tend to push out persons with low human capital.

If we compare the educational standard of the in/out migrants with that of the natives certain interesting facts emerge. It is observed that most of the out migrants from Assam, Bihar, Himachal Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Tamil Nadu and Uttar Pradesh have human capital less than the average of the natives of the sending region. This indicates that the outflow from these regions is of a low quality. On the other hand, out-migrants from Andhra Pradesh, Orissa, Manipur, Meghalaya and Nagaland have superior human capital compared to those who are left behind, indicating drain of human capital from these regions.

What is the impact on the human capital stock of destination/receiving regions? It is observed that among the states where net in-migration positive, educational profile of the migrants are better than that of the natives in Chhattisgarh, Delhi, Gujarat and Karnataka. These states are therefore gaining human capital throw migration. On the contrary in states like Haryana, Kerala, Maharashtra, Punjab and West Bengal the in-migrants are of a lower educational background compared to the natives, implying that the human capital stock of these states deteriorate due to the migration process.

VII. WAGES AND WAGE SETTING PROCESS

The type and heterogeneity of migrants will be clearer if we look at the average wages received by different sub-groups. It is observed that in urban areas average wages of migrant males are higher than the natives in almost all the states except Orissa and NE states (Table 10). This confirms our earlier suggestion that migrants, especially those in urban areas are better endowed. The same is true for rural areas also except the fact that in states like Punjab, Haryana, JK, and Uttar Pradesh, migrants in rural areas earn less than the natives. It may be noted that in those states rural migrants are mostly agricultural labourers and hence lack the skill / training or bargaining power to garner higher wages.

The wage setting process of the migrants vis-à-vis the natives is also of interest. A wage function where log of wage is expressed as functions of Work Experience, Education, Occupation group and Gender has been estimated. It is observed that for both casual wage workers and regular wage workers education (completed years of schooling) and experience in the job market have positive effect on weekly wages (Table 11). Males earn more than females and as expected white and pink collar occupations offer higher wages compared to blue collar jobs. Returns to education and experience are higher in urban areas in most cases, except for migrant regular workers.

Compared between natives and migrants, the latter group has higher base wages and also higher gender gap, which may arise due to sample selection bias in terms of women workers. However returns to education and experience are higher for natives except for urban regular wage employees. For this group returns to education and experience as well as wage premia due to white collar occupation are higher for migrants compared to the natives. This may be because of higher endowment among migrants, especially those who are in the urban regular wage market.

VIII. CONCLUSION

What also emerges from our discussion is that both push and pull factors are operative in the country. As a result of which the migrants have a wider variation in terms of education, job profile and occupation.

There are thus two different kinds of people who are moving. The first group is the well endowed human capital rich popular who are moving, mostly from urban to urban centres for employment reasons, and in response to assured and regular job offers in the organized sector. The second group are those with low human capital, moving in search of jobs, mostly from rural to urban centres, and gets absorbed in irregular, low paying jobs, even those being uncertain.

This indicates that migrant workers in India are a heterogeneous group with their motives being poles apart as also their ability and skill/training. Therefore impacts in both source and destination are as will be diverse and complex depending on the type of migrants that leave/arrive. Such movements also have social and cultural dimensions in a large and ethnically varied country like India and the situation has to be intricately monitored, and the rough edges have to the smoothened lest things go out of control.

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Table 1

Number of Internal Migrants in Millions – 2007

State	*Rural Male*	*Rural Female*	*Rural Total*	*Urban Male*	*Urban Female*	*Urban Total*	*All Total*
Andaman & Nicober	0.06	0.06	0.12	0.03	0.03	0.06	0.18
Andhra Pr	2.38	13.06	15.43	3.44	4.78	8.22	23.65
Arunachal Pr	0.01	0.00	0.01	0.00	0.00	0.01	0.01
Assam	0.32	2.41	2.73	0.29	0.34	0.63	3.36
Bihar	0.41	12.45	12.86	0.80	1.72	2.52	15.38
Chandigarh	0.04	0.03	0.07	0.22	0.18	0.41	0.47
Chhattisgarh	0.69	5.02	5.71	0.64	1.01	1.65	7.36
Dadra & NH	0.02	0.04	0.07	0.01	0.01	0.02	0.08
Daman & Diu	0.03	0.02	0.05	0.01	0.01	0.01	0.06
Delhi	0.15	0.18	0.33	2.90	2.30	5.20	5.53
Goa	0.04	0.10	0.13	0.13	0.18	0.31	0.44
Gujarat	0.87	8.48	9.35	2.66	3.95	6.62	15.97
Haryana	0.35	4.38	4.73	0.89	1.59	2.48	7.20
Himachal Pr	0.42	1.72	2.14	0.13	0.16	0.29	2.43
Jammu & Kashmir	0.08	1.10	1.18	0.07	0.20	0.28	1.46
Jharkhand	0.10	3.10	3.20	0.40	0.64	1.03	4.24
Karnataka	1.35	7.63	8.98	2.12	3.07	5.19	14.17
Kerala	2.12	5.48	7.61	0.86	1.59	2.45	10.06
Lakshadweep	0.01	0.00	0.01	0.01	0.00	0.01	0.02
Madhya Pr	0.73	11.60	12.33	1.19	3.66	4.86	17.19
Maharashtra	2.83	15.68	18.51	7.24	9.00	16.24	34.75
Manipur	0.00	0.00	0.01	0.00	0.01	0.01	0.02
Meghalaya	0.04	0.03	0.06	0.01	0.01	0.02	0.08
Mizoram	0.03	0.03	0.05	0.04	0.04	0.08	0.13
Nagaland	0.02	0.03	0.06	0.04	0.04	0.07	0.13
Orissa	0.67	8.11	8.78	0.83	1.38	2.21	10.98
Pondicherry	0.03	0.06	0.09	0.05	0.10	0.15	0.23
Punjab	0.61	4.37	4.98	0.96	2.04	3.00	7.97
Rajasthan	1.05	11.79	12.84	1.69	3.20	4.89	17.73
Sikkim	0.05	0.09	0.14	0.02	0.02	0.04	0.17
Tamil Nadu	1.37	6.38	7.74	2.27	4.22	6.49	14.23
Tripura	0.08	0.23	0.32	0.03	0.06	0.09	0.41
Uttar Pr	1.79	32.84	34.63	3.07	7.93	11.00	45.63
Uttaranchal	0.49	1.74	2.23	0.46	0.57	1.03	3.26
West Bengal	1.40	14.95	16.35	2.22	4.28	6.50	22.85
All India	**20.62**	**173.19**	**193.81**	**35.70**	**58.32**	**94.03**	**287.84**

Source: Author's calculation based on NSSO (2007)

Table 2

Share of Migrants in Total Population – 2007

State	*Rural Male*	*Rural Female*	*Rural Total*	*Urban Male*	*Urban Female*	*Urban Total*	*All Total*
Andaman & Nicober	50.8	56.2	53.3	51.2	53.0	52.1	52.9
Andhra Pr	8.8	47.3	28.2	33.3	46.7	40.0	31.4
Arunachal Pr	1.1	0.5	0.8	3.8	2.7	3.3	1.3
Assam	2.6	22.7	12.0	22.3	32.7	27.0	13.4
Bihar	1.2	37.9	18.9	20.8	49.7	34.5	20.4
Chandigarh	71.0	62.8	67.2	54.4	52.1	53.3	54.9
Chhattisgarh	7.0	53.1	29.5	33.0	59.0	45.2	32.0
Dadra & NH	23.7	56.6	37.2	52.8	65.6	57.9	40.1
Daman & Diu	48.4	53.6	50.3	25.4	40.6	32.3	44.7
Delhi	28.2	40.7	33.9	43.1	42.2	42.7	42.0
Goa	12.0	29.6	21.2	32.3	42.9	37.7	30.6
Gujarat	5.3	57.2	29.9	27.6	46.5	36.5	32.3
Haryana	4.1	59.3	29.8	27.9	57.6	41.7	33.0
Himachal Pr	15.3	59.2	37.8	45.5	61.8	53.2	39.1
Jammu & Kashmir	2.4	32.9	17.4	9.7	28.1	18.6	17.6
Jharkhand	1.0	30.8	15.6	17.8	34.1	25.3	17.2
Karnataka	8.0	47.4	27.3	26.5	38.3	32.4	28.9
Kerala	19.5	45.9	33.3	25.8	42.8	34.8	33.7
Lakshadweep	32.0	23.9	28.1	39.2	21.5	30.3	29.1
Madhya Pr	3.0	53.3	26.8	16.0	52.3	33.6	28.4
Maharashtra	9.8	57.2	32.9	35.6	49.3	42.1	36.7
Manipur	0.6	0.5	0.6	1.0	2.6	1.8	0.9
Meghalaya	3.8	2.9	3.3	4.2	4.7	4.4	3.5
Mizoram	10.7	11.4	11.0	18.9	22.3	20.6	15.3
Nagaland	6.2	9.2	7.6	32.0	32.9	32.5	13.4
Orissa	4.3	51.1	28.0	32.4	56.7	44.2	30.2
Pondicherry	13.9	35.6	24.2	20.6	40.2	30.5	27.7
Punjab	7.4	57.1	31.2	22.3	56.5	37.9	33.4
Rajasthan	4.6	54.1	28.8	24.0	49.5	36.2	30.5
Sikkim	19.5	41.4	30.0	53.6	72.9	62.7	33.6
Tamil Nadu	7.9	35.4	22.0	17.6	31.6	24.7	23.2
Tripura	5.7	16.3	11.0	11.2	20.1	15.6	11.7
Uttar Pr	2.6	50.1	25.6	16.5	47.1	31.0	26.7
Uttaranchal	15.1	53.9	34.4	39.7	59.4	48.6	37.9
West Bengal	4.5	51.2	27.2	23.3	48.2	35.3	29.1
All India	**5.4**	**47.7**	**26.1**	**25.9**	**45.6**	**35.4**	**28.5**

Source: Author's calculation based on NSSO (2007)

Table 3

Education Status of Natives and Migrants

	Educational Status	*1987*						*2007*					
		Male			*Female*			*Male*			*Female*		
		Native	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*
RURAL	Illiterate	48.0	38.1	47.0	72.5	79.8	77.2	29.7	23.6	29.3	41.0	60.0	54.5
	Lit below Primary	14.1	13.4	14.0	7.6	6.7	7.0	11.0	10.3	11.0	10.3	9.0	9.4
	Primary Passed	14.5	15.2	14.6	8.5	7.0	7.6	16.4	13.5	16.2	12.7	11.9	12.1
	Middle Passed	12.6	13.1	12.7	6.4	3.9	4.8	19.7	17.8	19.5	16.3	10.2	12.0
	Secondary Passed	9.1	15.0	9.7	4.5	2.1	3.0	18.8	23.4	19.1	17.1	7.3	10.1
	Graduate & above	1.7	5.2	2.1	0.5	0.4	0.4	4.5	11.4	4.9	2.5	1.7	1.9
URBAN	Illiterate	19.2	16.6	18.3	37.3	46.1	42.3	11.9	10.6	11.4	19.8	30.6	26.3
	Lit below Primary	11.6	11.4	11.5	10.1	10.1	10.1	6.6	6.2	6.5	6.5	7.1	6.9
	Primary Passed	17.6	15.0	16.7	14.6	13.8	14.1	11.6	10.1	11.1	11.1	11.4	11.3
	Middle Passed	18.5	14.7	17.2	12.8	10.7	11.6	18.9	16.6	18.1	16.6	15.3	15.8
	Secondary Passed	23.5	28.0	25.1	18.4	13.7	15.8	31.6	30.3	31.2	30.7	22.7	25.7
	Graduate & above	9.6	14.3	11.3	6.7	5.7	6.1	19.3	26.2	21.5	15.2	13.1	14.0

Source: Author's calculation based on NSSO (1987) and NSSO (2007)

Table 4

Employment Type of Natives and Migrants

	Employment Status	*1987*						*2007*					
		Male			*Female*			*Male*			*Female*		
		Native	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*
RURAL	Not in Lab Force	12.9	14.3	13.1	67.7	63.8	65.2	14.0	20.9	14.4	67.5	62.1	63.7
	Unemployed	3.6	3.7	3.6	1.8	1.3	1.5	3.4	2.8	3.4	1.9	1.0	1.3
	Self Employed	51.1	39.3	49.9	15.5	21.0	19.0	47.8	34.1	46.8	15.8	23.0	20.9
	Wage Employed	32.3	42.7	33.4	15.0	13.8	14.3	34.9	42.2	35.4	14.7	13.9	14.1
URBAN	Not in Lab Force	18.9	16.3	18.0	78.7	81.5	80.3	20.2	18.5	19.7	78.8	82.6	81.1
	Unemployed	6.2	4.0	5.4	2.6	1.2	1.8	4.3	2.2	3.7	2.1	0.6	1.2
	Self Employed	35.9	24.2	31.7	7.2	7.4	7.3	36.2	25.6	32.8	7.1	7.3	7.2
	Wage Employed	39.1	55.6	45.0	11.5	9.8	10.6	39.2	53.6	43.8	11.9	9.5	10.5

Source: Author's calculation based on NSSO (1987) and NSSO (2007)

Table 5

Employment Type of Natives and Migrants

	Employment Type	*1987*						*2007*					
		Male			*Female*			*Male*			*Female*		
		Native	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*
RURAL	Self Employed	61.2	47.9	59.9	50.8	60.3	57.1	57.8	44.7	57.0	51.8	62.3	59.7
	Casual Wage Lab	29.7	26.2	29.3	42.1	35.3	37.6	33.6	29.8	33.4	40.9	33.2	35.1
	Regular Wage Wkr	9.1	26.0	10.8	7.1	4.4	5.3	8.6	25.5	9.7	7.3	4.4	5.2
URBAN	Self Employed	47.8	30.3	41.3	38.4	42.9	40.9	48.0	32.4	42.8	37.2	43.5	40.8
	Casual Wage Lab	15.1	10.6	13.4	23.2	24.2	23.7	16.2	11.2	14.5	18.8	18.4	18.6
	Regular Wage Wkr	37.1	59.0	45.3	38.4	32.9	35.4	35.8	56.5	42.6	44.0	38.1	40.6

Source: Author's calculation based on NSSO (1987) and NSSO (2007)

Table 6

Occupational Status of Natives and Migrants

	Occupational Status	*1987*						*2007*					
		Male			*Female*			*Male*			*Female*		
		Native	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*	*Native*	*Migrant*	*All*
RURAL	Technical	0.3	2.0	0.5	0.2	0.3	0.3	0.5	1.9	0.5	0.5	0.4	0.4
	Professionals	1.4	5.5	1.8	1.2	1.0	1.1	3.0	7.9	3.3	3.0	2.4	2.5
	Administrative	0.8	1.9	0.9	0.7	0.5	0.6	2.2	4.5	2.4	1.4	1.1	1.2
	Clerical	1.6	4.8	2.0	0.4	0.3	0.3	1.3	4.6	1.5	1.1	0.5	0.6
	Sales	5.0	7.9	5.3	3.2	2.7	2.8	4.6	7.7	4.8	2.8	1.7	1.9
	Service	2.1	4.8	2.3	2.9	2.9	2.9	2.2	5.5	2.4	3.0	2.4	2.5
	Farmers	73.4	49.4	71.0	76.8	81.1	79.6	66.9	37.8	65.0	74.3	82.7	80.6
	Production etc.	3.9	6.1	4.1	7.7	4.7	5.7	2.9	5.3	3.1	7.4	3.7	4.6
	Transport	3.2	5.9	3.5	0.9	0.9	0.9	4.2	7.9	4.5	0.9	0.9	0.9
	Labourers nec	8.3	11.8	8.6	6.1	5.7	5.8	12.2	17.0	12.5	5.7	4.3	4.6
URBAN	Technical	2.0	4.3	2.9	2.4	3.5	3.0	1.8	4.1	2.6	3.4	4.6	4.1
	Professionals	3.6	5.4	4.3	11.2	11.0	11.1	10.3	12.2	10.9	18.8	15.0	16.7
	Administrative	5.3	6.4	5.7	3.1	2.6	2.8	11.7	9.5	11.0	5.2	6.3	5.8
	Clerical	9.9	14.8	11.7	8.1	5.1	6.5	7.0	9.5	7.8	9.5	5.6	7.3
	Sales	21.6	14.3	18.9	9.2	9.8	9.5	18.2	11.8	16.1	8.5	7.6	8.0
	Service	7.0	10.3	8.2	17.5	17.3	17.4	6.6	10.0	7.7	16.5	18.9	17.8
	Farmers	10.6	3.7	8.0	14.3	24.2	19.7	7.3	3.1	5.9	10.2	16.4	13.7
	Production etc.	10.7	11.1	10.8	20.4	13.8	16.8	7.7	8.2	7.8	17.3	14.7	15.8
	Transport	12.0	12.2	12.1	2.5	2.0	2.2	10.0	9.9	10.0	1.6	1.4	1.5
	Labourers nec	17.4	17.5	17.4	11.1	10.8	10.9	19.5	21.7	20.2	9.0	9.6	9.4

Source: Author's calculation based on NSSO (1987) and NSSO (2007)

Table 7a

Migration Patterns – Movement Type and Reasons – 1987

Gender	*Reasons for Migration*	*Intra District*	*Inter District*	*Inter State*	*Inter national*	*ALL*
MALE	Education	5.9	2.6	1.0	0.1	9.6
	Employment related	29.3	24.5	18.5	0.7	73.0
	Marriage	6.4	1.5	0.4	0.0	8.4
	Natural disaster	0.6	0.3	0.1	0.1	1.1
	Social problems	3.3	0.9	0.9	2.8	7.9
	All Reasons	**45.6**	**29.7**	**21.0**	**3.7**	**100.0**
FEMALE	Education	0.5	0.2	0.0	0.0	0.7
	Employment related	1.3	0.7	0.3	0.0	2.4
	Marriage	73.5	17.0	4.8	0.2	95.5
	Natural disaster	0.1	0.1	0.0	0.0	0.2
	Social problems	0.6	0.2	0.1	0.4	1.2
	All Reasons	**76.0**	**18.1**	**5.3**	**0.6**	**100.0**

Source: Author's calculation based on NSSO (1987)

Table 7b

Migration Patterns – Movement Type and Reasons – 2007

Gender	*Reasons for Migration*	*Intra District*	*Inter District*	*Inter State*	*Inter national*	*ALL*
MALE	Displacement	0.5	0.1	0.1	0.0	**0.7**
	Education	6.8	4.7	1.8	0.0	**13.4**
	Employment related	19.0	26.8	28.0	0.7	**74.6**
	Health	0.2	0.4	0.4	0.1	**1.1**
	Marriage	5.0	1.6	0.4	0.0	**7.1**
	Natural disaster	0.8	0.1	0.0	0.0	**0.9**
	Social problems	0.5	0.3	0.3	1.0	**2.1**
	All Reasons	**32.9**	**34.1**	**31.1**	**1.8**	**100.0**
FEMALE	Displacement	0.1	0.0	0.0	0.0	**0.1**
	Education	0.6	0.4	0.1	0.0	**1.1**
	Employment related	0.5	0.6	0.2	0.0	**1.3**
	Health	0.1	0.0	0.0	0.0	**0.1**
	Marriage	65.8	25.4	5.6	0.1	**97.0**
	Natural disaster	0.1	0.0	0.0	0.0	**0.1**
	Social problems	0.1	0.1	0.0	0.1	**0.3**
	All Reasons	**67.3**	**26.5**	**6.0**	**0.2**	**100.0**

Source: Author's calculation based on NSSO (2007)

Table 8a

Migration Patterns – Movement Type and Reasons – 1987

Gender	*Reasons for Migration*	*Rural-Rural*	*Rural-Urban*	*Urban-Rural*	*Urban-Urban*	*ALL*
MALE	Education	3.4	4.3	0.5	1.7	**9.9**
	Employment related	21.4	30.3	5.7	17.6	**75.1**
	Marriage	6.9	0.9	0.4	0.5	**8.6**
	Natural disaster	0.6	0.1	0.1	0.2	**1.0**
	Social problems	3.1	0.8	0.8	0.7	**5.4**
	All Reasons	**35.4**	**36.4**	**7.6**	**20.7**	**100.0**
FEMALE	Education	0.2	0.3	0.0	0.2	**0.7**
	Employment related	1.0	0.7	0.2	0.4	**2.4**
	Marriage	77.2	9.4	4.3	5.0	**95.9**
	Natural disaster	0.1	0.0	0.0	0.0	**0.2**
	Social problems	0.5	0.1	0.1	0.1	**0.9**
	All Reasons	**79.2**	**10.5**	**4.6**	**5.8**	**100.0**

Source: Author's calculation based on NSSO (1987)

Table 8b

Migration Patterns – Movement Type and Reasons – 2007

Gender	*Reasons for Migration*	*Rural-Rural*	*Rural-Urban*	*Urban-Rural*	*Urban-Urban*	*ALL*
MALE	Displacement	0.3	0.2	0.0	0.2	**0.7**
	Education	4.7	5.0	1.8	2.2	**13.6**
	Employment related	12.9	38.7	4.2	19.5	**75.3**
	Health	0.2	0.2	0.4	0.2	**1.0**
	Marriage	5.4	1.0	0.3	0.5	**7.2**
	Natural disaster	0.7	0.2	0.0	0.0	**0.9**
	Social problems	0.6	0.3	0.2	0.1	**1.1**
	All Reasons	**24.8**	**45.5**	**7.0**	**22.7**	**100.0**
FEMALE	Displacement	0.0	0.0	0.0	0.0	**0.1**
	Education	0.4	0.4	0.1	0.2	**1.1**
	Employment related	0.4	0.5	0.1	0.3	**1.3**
	Health	0.1	0.0	0.0	0.0	**0.1**
	Marriage	75.1	10.8	4.2	7.0	**97.1**
	Natural disaster	0.1	0.0	0.0	0.0	**0.1**
	Social problems	0.1	0.0	0.0	0.0	**0.2**
	All Reasons	**76.2**	**11.7**	**4.4**	**7.6**	**100.0**

Source: Author's calculation based on NSSO (2007)

Table 9

Regional Determinants of Migration – Correlation Coefficients

Migration Indicators	*1987*				*2007*			
	Rural Poverty	*Urban Poverty*	*Aggregate Poverty*	*PCNSDP*	*Rural Poverty*	*Urban Poverty*	*Aggregate Poverty*	*PCNSDP*
Actual Numbers								
In-Migration %	-0.61*	-0.53*	-0.53*	0.88**	-0.49	-0.28	-0.36	0.49
	(0.01)	(0.04)	(0.04)	(0.00)	(0.05)	(0.29)	(0.17)	(0.05)
Out-Migration %	-0.79**	-0.74**	-0.75**	0.82**	-0.04	0.18	0.12	0.27
	(0.00)	(0.00)	(0.00)	(0.00)	(0.88)	(0.50)	(0.67)	(0.31)
Net Out-migration %	0.51*	0.42	0.41	-0.85**	0.63**	0.46	0.53*	-0.51*
	(0.04)	(0.11)	(0.11)	(0.00)	(0.01)	(0.07)	(0.04)	(0.04)
Human Capital Adjusted								
In-Migration %	-0.60*	-0.51*	-0.52*	0.88**	-0.49	-0.29	-0.36	0.49*
	(0.01)	(0.04)	(0.04)	(0.00)	(0.05)	(0.28)	(0.17)	(0.05)
Out-Migration %	-0.79**	-0.83**	-0.80**	0.65**	-0.20	0.17	-0.02	0.16
	(0.00)	(0.00)	(0.00)	(0.01)	(0.45)	(0.53)	(0.94)	(0.56)
Net Out-migration %	0.43	0.31	0.32	-0.81**	0.53*	0.43	0.44	-0.56*
	(0.09)	(0.24)	(0.22)	(0.00)	(0.03)	(0.10)	(0.09)	(0.02)

Source: Author's calculation based on NSSO (1987) and NSSO (2007)

Table 10

Average Wage per Week (in ₹) – Current Prices – 2007

State	RURAL				URBAN			
	Male		Female		Male		Female	
	Native	Migrant	Native	Migrant	Native	Migrant	Native	Migrant
Andaman & Nicober	766	818	672	751	849	838	1016	352
Andhra Pr	442	459	259	265	541	612	287	305
Arunachal Pr	520	2020	558	368	527	393	440	
Assam	457	397	329	343	484	617	487	602
Bihar	349	305	191	224	382	641	355	242
Chandigarh	1080	741			657	786	520	521
Chhattisgarh	248	322	215	203	324	357	182	230
Dadra & NH	590	989	600	400	600	850		
Daman & Diu	782	1516		323	785	515	380	521
Delhi	943	531	445	522	595	691	636	418
Goa	624	415	174	229	836	1032	373	254
Gujarat	396	633	306	298	696	722	347	300
Haryana	624	494	500	414	641	720	341	226
Himachal Pr	637	770	413	618	595	734	280	441
Jammu & Kashmir	675	544	697		826	872		639
Jharkhand	390	552	245	275	587	815	403	436
Karnataka	392	503	255	236	641	788	323	336
Kerala	766	803	374	393	745	867	423	491
Lakshadweep	587	871	375		568	1689	500	
Madhya Pr	302	315	239	231	409	489	239	241
Maharashtra	355	416	197	214	550	648	355	326
Manipur	542	863	608		734	162	156	
Meghalaya	641	555	377	323	769	467	429	348
Mizoram	372	315	285	175	733	625	405	509
Nagaland	859	694			714	1391		
Orissa	317	332	184	209	427	401	243	227
Pondicherry	458	517	153	168	659	597	386	559
Punjab	578	572	379	414	662	746	330	326
Rajasthan	538	592	398	409	589	586	300	365
Sikkim	473	729	336	467	350	1031		
Tamil Nadu	500	515	238	220	595	668	292	259
Tripura	474	471	375	322	547	712	326	427
Uttar Pr	421	390	301	276	521	594	219	346
Uttaranchal	550	566	433	403	577	567	625	356
West Bengal	367	393	250	247	481	515	238	241

Source: Author's calculation based on NSSO (2007)

Table 11

Wage Function Determination - 2007

Causal Variable	*RURAL*		*URBAN*	
	Native	***Migrant***	***Native***	***Migrant***
Casual Wage Labourer				
(Constant)	5.249** (0.01)	5.283** (0.01)	5.045** (0.01)	5.372** (0.01)
Experience	0.013** (0.01)	0.013** (0.01)	0.032** (0.01)	0.018** (0.01)
Experience squared	-0.001** (0.01)	-0.001** (0.01)	-0.002** (0.01)	-0.001** (0.01)
Years of Schooling	0.020** (0.01)	0.010** (0.01)	0.038** (0.01)	0.019** (0.01)
Gender Dummy	0.457** (0.01)	0.640** (0.01)	0.600** (0.01)	0.740** (0.01)
Occupation Dummy-I	0.277** (0.01)	0.290** (0.01)	0.150** (0.01)	0.401** (0.01)
Occupation Dummy-II	0.082** (0.01)	0.039** (0.01)	0.004** (0.01)	-0.012** (0.01)
Adjusted R-squared	0.105	0.162	0.209	0.361
F-stat	1325 X 10^3	747 X 10^3	403 X 10^3	404 X 10^3
Number of Observations	67425 X 10^3	23171 X 10^3	9158 X 10^3	4282 X 10^3
Regular Wage Worker				
(Constant)	4.594** (0.01)	4.597** (0.01)	4.905** (0.01)	5.112** (0.01)
Experience	0.060** (0.01)	0.050** (0.01)	0.051** (0.01)	0.039** (0.01)
Experience squared	-0.002** (0.01)	-0.002** (0.01)	-0.002** (0.01)	-0.001** (0.01)
Years of Schooling	0.094** (0.01)	0.120** (0.01)	0.110** (0.01)	0.097** (0.01)
Gender Dummy	0.532** (0.01)	0.633** (0.01)	0.326** (0.01)	0.532** (0.01)
Occupation Dummy-I	0.051** (0.01)	0.010** (0.01)	0.388** (0.01)	0.543** (0.01)
Occupation Dummy-II	-0.034** (0.01)	-0.203** (0.01)	0.006** (0.01)	0.027** (0.01)
Adjusted R-squared	0.386	0.522	0.456	0.488
F-stat	1774 X 10^3	1068 X 10^3	2874 X 10^3	2724 X 10^3
Number of Observations	16940 X 10^3	5879 X 10^3	20586 X 10^3	17165 X 10^3

Source: Author's calculation based on NSSO (2007)

Note: Figures in parenthesis are Significance levels; ** represent significant at 1 per cent level